REPORT OF THE
COMPTROLLER GENERAL
OF THE UNITED STATES

Comments On Selected Aspects Of The Administration's Proposal For Government Assistance To Private Uranium Enrichment Groups

This report presents GAO's views on matters raised by the Vice Chairman, Joint Committee on Atomic Energy, related to the private ownership of uranium enrichment and reemphasizes GAO's belief that the Government should add on to one of its existing enrichment plants to provide the next increment of enrichment capacity.

RED-76-110

COMPTROLLER GENERAL OF THE UNITED STATES
WASHINGTON, D.C. 20548

B-159687

The Honorable Melvin Price
Vice Chairman, Joint Committee
on Atomic Energy
Congress of the United States

Dear Mr. Vice Chairman:

Your February 6, 1976, letter raised certain matters relating to the proposed Nuclear Fuel Assurance Act of 1975 (H.R. 8401). This legislation is currently being considered by the Joint Committee on Atomic Energy. As you requested, we are submitting our comments on the matters discussed in your letter. (See app. I.)

As you know, our October 31, 1975, report entitled "Evaluation of the Administration's Proposal for Government Assistance to Private Uranium Enrichment Groups" (RED-76-36), presented our views on the proposed Nuclear Fuel Assurance Act and specifically a proposal from Uranium Enrichment Associates to provide the next increment of enrichment capacity. We testified in support of the views expressed in the report at hearings held by the Joint Committee on December 10, 1975.

One important point that has been raised since that report was issued and our testifying is whether funds authorized under the proposed act should be included in the budget.

In a letter dated March 16, 1976, (B-159687) to the Chairman, Senate Committee on the Budget (see app. II), we expressed our view that, for the Congress to achieve the maximum effectiveness of the process it established to control the budget, the amounts of authority approved by appropriation acts for cooperative arrangements under the Nuclear Fuel Assurance Act should be reflected in the budget.

In addition, we would like to highlight that the Energy Research and Development Administration, on February 23, 1976, agreed to certain revisions to the proposed act which we believe will give the Joint Committee a degree of oversight over the initiation of a cooperative agreement or any major changes to that agreement. (See app. III.) In view of the potential liability being assumed by the Energy

Research and Development Administration, however, we believe that it would be desirable for the Joint Committee to review the status of each contract approved under the proposed Nuclear Fuel Assurance Act during its annual authorization hearings.

We would also like to take this opportunity to reemphasize certain points made in our October 31, 1975, report. Specifically, we are still of the opinion that:

--Management of the Government enrichment facilities could be accomplished more effectively by a corporation having a self-financing authority to borrow funds from the Treasury or the public. A self-financing proposal would free the corporation from the budgetary requirement of seeking congressional approval of appropriations, thereby achieving a major goal sought by the present legislative proposal.

--The Joint Committee on Atomic Energy should approve legislation authorizing the Energy Research and Development Administration to construct the next increment of enrichment capacity using the proven enrichment process.

--The Energy Research and Development Administration should seek and encourage private industry to continue efforts in advanced technologies through explicit programs. We recognize that Government assistance and assurances will be required. In working to this end, however, the Government should seek an equitable sharing of risk by the private enrichers and the Government.

As your office instructed, we did not obtain agency comments on the matters contained in this report.

We will contact your office in the near future to arrange for the release of this report so that copies may be provided to other congressional committees and to interested Members of Congress.

Sincerely yours,

Elmer B. Staats

Comptroller General
of the United States

Contents

ABBREVIATIONS

ERDA	Energy Research and Development Administration
UEA	Uranium Enrichment Associates
AEC	Atomic Energy Commission
NRC	Nuclear Regulatory Commission

COMMENTS ON SELECTED ASPECTS OF THE PROPOSED NUCLEAR FUEL ASSURANCE ACT OF 1975 (H.R. 8401)

BACKGROUND

Before uranium can be used in most nuclear powerplants to generate electricity, it must undergo a process called enrichment. All existing uranium enrichment facilities in the United States are owned by the Energy Research and Development Administration (ERDA).

The continued growth and development of nuclear-powered electrical generating facilities, both at home and abroad, are contingent on additional uranium enrichment capacity. While the immediacy of the need cannot be stated with certainty, projections indicate that additional capacity will be required by the early 1980s. Because of the long leadtime associated with the design and construction of enrichment facilities, prompt decisions regarding the amount, the type, and the manner of that capacity are needed.

The Administration has proposed legislation--the Nuclear Fuel Assurance Act (H.R. 8401)--intended to facilitate both decisions and action. The proposed act is intended to encourage private ownership of the enrichment process and it would:

--Authorize ERDA to enter into cooperative arrangements with as many private firms that wish to build, own, and operate enriching plants as the ERDA Administrator believes necessary to develop a competitive industry.

--Authorize ERDA to provide various forms of assistance and assurances under such arrangements.

--Limit the U.S. Government's total potential liability to $8 billion in the event that the private ventures fail and the Government has to take them over.

--Authorize ERDA to start construction planning and design activities for expanding one the Government's existing enrichment facilities as a contingency measure.

--Provide for congressional review of the basis for the cooperative arrangements by the Joint Committee on Atomic Energy.

ERDA and private firms interested in building enrichment plants say Federal assistance is necessary to overcome uncertainties associated with private firms providing enrichment capacity. These uncertainties are:

--Processes have not been shown to be operable in a commercial environment.

--Technology is classified.

--Large capital requirements and a long payback period are required.

--Licensing uncertainties exist.

--Threat of a nuclear moratorium exists.

--Many domestic electrical utilities are in weak financial condition.

A basic difference exists between a decision on the provision of the next increment of enrichment capacity and a decision on future increments of uranium enrichment capacity.

While it may be possible to provide the next increment using the newer gaseous centrifuge process, it is generally agreed that the proven gaseous diffusion process should be used to provide the next increment so that the country will be more certain of an adequate supply of enriched uranium during a period of transition between diffusion and centrifuge technology.

For the next increment using the proven gaseous diffusion technology, ERDA has received a single proposal from Uranium Enrichment Associates (UEA). Several proposals have been received with respect to subsequent increments using the more advanced gaseous centrifuge process.

The following sections of this appendix address certain specific concerns raised by the Vice Chairman, Joint Committee on Atomic Energy, in a letter dated February 6, 1976.

ERDA AUTHORITY FOR RESEARCH, DEVELOPMENT, DEMONSTRATION, AND COMMERCIALIZATION

Section 31(a)(4) of the Atomic Energy Act of 1954, as amended, (42 U.S.C. 2051 (a)(4)) authorizes and directs the Atomic Energy Commission (AEC), now ERDA, to enter into arrangements for research and development activities, including, among other things,

> "* * * utilization of special nuclear material, atomic energy, and radioactive material and processes entailed in the utilization or production of atomic energy or such material for all other purposes, including industrial or commercial uses, the generation of useable energy, and the demonstration of advances in the commercial or industrial application of atomic energy * * *"

UEA proposes to use the existing gaseous diffusion process to provide the next increment of uranium capacity. This process has been demonstrated and used successfully by AEC and ERDA since the 1940s. Thus, demonstration within the meaning of the term as found in the Atomic Energy Act would not appear to be involved.

The Vice Chairman, in his February 1976 letter, stated that the Atomic Energy Act did not provide for Government assistance to private facilities for purposes beyond research and development and, therefore, the proposed Nuclear Fuel Assurance Act departed significantly from established precedent.

We agree that, if enacted, the Nuclear Fuel Assurance Act would expand ERDA's authority beyond that currently provided by the Atomic Energy Act. ERDA is not now, and to our knowledge neither ERDA nor AEC in the past has been, authorized to enter into cooperative arrangements for commercially owned projects of the magnitude envisioned by the Nuclear Fuel Assurance Act. Thus, the proposed Nuclear Fuel Assurance Act would expand ERDA's authority in this field.

Consequently, enabling legislation, such as the Nuclear Fuel Assurance Act, will be required if the Federal Government, through ERDA, is to provide incentives for the private ownership of the enrichment industry.

JOINT COMMITTEE OVERSIGHT PROVIDED BY THE NUCLEAR FUEL ASSURANCE ACT

The Vice Chairman, in his February 1976 letter, raised a question as to whether the Nuclear Fuel Assurance Act was restrictive enough as to the nature and scope of the Government's assistance when compared to previous cooperative agreements under the cooperative power reactor demonstration program. He said these arrangements were based on legislative authorizations that specified or restricted the types of Government assistance and time periods involved.

Previous agency cooperative agreements with the private sector under the cooperative power reactor demonstration program have, at least initially, required substantial Federal funding over long periods of time. The program provided for cooperative participation by the Government and private industry in developing, designing, constructing, and operating demonstration nuclear powerplants to aid in developing an economically competitive nuclear industry.

Cooperative agreements under this program have, since about 1957, been based on specific legislative authorizations under the provisions of section 261 of the Atomic Energy Act and have generally been specific in terms of Government assistance rendered and its duration. In this connection, the terms and conditions are those laid down by the Congress in the authorization acts passed under section 261 of the Atomic Energy Act.

On the other hand, the Nuclear Fuel Assurance Act would give ERDA considerable discretion in regard to both periods of time and Government cooperation and assurance. While the bill describes various types of assistance the agency may give to private enrichment groups, the Administrator is free to consider other types of assistance.

ERDA has taken the position that the flexibility provided in the Nuclear Fuel Assurance Act is necessary if the bill is to cover all private enrichment groups because the types of assurances which will be required by groups using the more advanced technologies have yet to be determined. To balance this broad authority, ERDA has agreed to certain revisions to the Senate version of the proposed act (S. 2035). (See app. III.)

These proposed revisions provide for submission of proposed agency actions to the Joint Committee on Atomic Energy and for a 60-day congressional oversight period. The agency actions which would fall within the purview of the revisions are

--entry into any arrangement authorized by the bill,

--entry into any amendment of any arrangement authorized by the bill,

--modification of any facility,

--completion and operation of any facility, or

--disposal of any facility.

The 60-day congressional oversight period in the proposed revision is divided into two parts. During the first 30 days, the Joint Committee is charged with submitting a report to the Congress and a proposed concurrent resolution either for or against the proposed agency action. During the second 30 days, the resolution will be voted on by both Houses of Congress. The House of Representatives' version of the bill limits congressional oversight of a proposed agency action to submission to the Joint Committee and a 45-day delay.

We believe this revision will give the Joint Committee a degree of oversight over the initiation of a cooperative agreement or any major changes to that agreement. In view of the potential liability being assumed by ERDA, however, we believe it would be desirable for the Joint Committee to review the status of each contract approved under the proposed Nuclear Fuel Assurance Act during ERDA's annual authorization hearings.

The Congress has another opportunity to observe the agreements which the Administrator enters under the proposed legislation. This extra, though limited, opportunity is provided through the budget process. In our letter dated March 16, 1976, to the Chairman, Senate Committee on the Budget, (see app. II), we set forth our views on the scope of the oversight which the Congressional Budget Act of 1974 affords with respect to agreements which may be entered into under the proposed legislation. We noted that, for the Congress to achieve the maximum effectiveness of the process it established to control the budget, the amounts of authority approved by appropriation acts for cooperative arrangements under the Nuclear Fuel Assurance Act should be reflected in the budget.

UEA WITHDRAWAL RIGHTS

Under the May 30, 1975, UEA proposal, the Government, at UEA's request, has the obligation to purchase the domestic owners' controlling interests in the UEA plant. This option would terminate 1 year after the plant demonstrates full-scale steady commercial operation. If ownership transfers, the Government would have to assume all domestic liabilities. Beyond this, the Government's payment to UEA for ownership would depend on the reason for the transfer. The Government would return all the domestic equity and additional compensation as determined by the Government in case of events caused by the Government or otherwise beyond UEA's control.

The Vice Chairman in his letter expressed concern that, faced with a threat of withdrawal and demand for a large payment representing the domestic owners' interests, the Government would be compelled to consider in relatively favorable light revisions in the cooperative arrangement which the contractor might demand as the price for nontermination. He believed this device could be triggered more than once, depending on the difficulties encountered by the contractor.

The Government might be placed in an unfavorable position when considering revisions proposed by UEA in its cooperative agreement if UEA could withdraw from its agreement thereby necessitating large Federal expenditures. On the other hand, UEA, or any other private organization, would probably enter into such an agreement in good faith with a view towards successfully completing the project and making a profit. Whether UEA would use a threat of withdrawal to obtain revisions it sought to the cooperative arrangement is not known. We believe that the likelihood of UEA making such a threat would be reduced if it were required to forfeit its entire equity in a situation where it sought termination for reasons other than the failure of the Government's classified process to operate successfully in the UEA plant. In any event, the Congress will need to carefully weigh the risks of such threats against the potential benefits of encouraging private industry to provide the next increment of enrichment capacity as compared to adding on to ERDA's existing enrichment facilities.

POSSIBILITY OF USING AGREEMENTS AS A BASIS FOR LEGISLATION

The Vice Chairman in his February 1976 letter believed that, because the request for legislation is based on a bare outline of terms, identification of participants and their respective rights, and other basic features, perhaps the best negotiating climate and least likelihood of serious misunderstandings would arise from preliminary contemporaneous negotiations between UEA and ERDA, between UEA and its participating parties, and the invited presence of the latter (particularly the major foreign investors) during the UEA-ERDA negotiations. In his opinion, an ensuing agreement could then provide the basis for a request for enabling legislation.

On December 24, 1975, we responded to Committee questions raised concerning our December 10, 1975, testimony on the Nuclear Fuel Assurance Act. At that time we noted that any proposed agreements between ERDA and private enrichers should be submitted to the Congress and referred to the Joint Committee. The Committee could then examine the proposal and submit

a report to the Congress on its views and recommendations with respect to the proposed agreement. It could also submit an accompanying proposed concurrent resolution stating that the Congress favors or does not favor, as the case may be, the proposed agreement. As noted on page 4, revisions have been made to the Senate version of the bill to provide for such a review process.

In our view, if private ownership is desirable, the present course of action being taken by the Joint Committee of providing broad legislative authority with the right to approve or disapprove any resulting cooperative agreement is more desirable than basing legislation on the UEA or some similar proposal and perhaps requiring changes to that legislation whenever other agreements containing new and different conditions are proposed for the gas centrifuge process.

In addition, as noted on page 5, we believe that (1) a status review of the current situation surrounding each approved contract should be presented to the Congress each year as part of ERDA's authorization request and (2) the amounts of contract authority approved by appropriation acts for cooperative arrangements pursuant to the Nuclear Fuel Assurance Act should be reflected in the budget. Providing for such reviews, along with the approval process discussed above, would establish a degree of oversight and review authority which would, to some extent, preclude the creation of an out-of-sight, out-of-mind situation which could escalate into a governmental liability of considerable magnitude.

ERDA'S ROLE IN UEA PLANT'S OPERATION

The Vice Chairman's February 1976 letter noted that the information provided in support of the legislation for Federal assistance to a privately owned gaseous diffusion plant indicates that the Government's role in the project would end after the first year of operation and that the enterprise would then continue in a wholly private, commercial environment. He believed that, assuming security considerations are still applicable at that time, ERDA would continue to interact with the operation and maintenance of the plant in regard to replacements of the secret process materials or components under its exclusive control.

The May 30, 1975, UEA proposal requests assurance that the Government will supply UEA, at cost, essential mechanical components of the plant, such as barriers and seals, which, for security reasons, are presently produced exclusively by the Government. According to ERDA officials, provisions

obligating the Government to sell replacement components for which the Government is the sole supplier will be included in the final agreement. These officials further noted that all financial and process guarantees and separative work unit stockpile access provisions would end after meeting specified time periods provided in the contract. They said that the Government, after these time periods, would not interact with the operation and maintenance of the plant except as a contracted supplier of mechanical component parts.

BASIS FOR GOVERNMENT TAKE OVER OF UEA PLANT

The Vice Chairman's letter expressed concern about the apparent unwillingness of UEA to stand behind its own design, construction, and operation. He said that although the Government would guarantee that its secret process would work, UEA would apparently not guarantee anything that it provides or arranges for (basic design integrity, bricks, mortar, pumps, testing and operational soundness, etc.).

The Vice Chairman's letter also questioned the circumstances under which ownership would be transferred to the Government without reimbursing domestic investors for their equity (only in cases of events involving gross mismanagement, gross negligence, or willful misconduct by UEA).

Prerequisites to finding gross mismanagement, gross negligence, or willful misconduct include (1) a formally written notice of deficiencies transmitted to UEA by the Government and (2) failure by UEA to respond reasonably to the notice. In this respect, the Vice Chairman's letter expressed concern that, in the interval between the notice, ERDA's proof of charges, and UEA's opportunity to rectify, UEA could exercise its unilateral right to withdraw and be fully compensated by the Government.

The language in the UEA proposal dealing with gross negligence is directed toward the calculation of the price the Government would have to pay for the acquisition of UEA assets should either the Government or UEA choose to exercise the "transfer of ownership" mechanism set out in the UEA proposal. The transfer mechanism assumes a priori that the Government will be responsible for all domestic debt incurred by UEA in its venture. Under certain circumstances the Government might also be liable for domestic equity in addition to the domestic debt. As set out in the proposal, the spectrum of this additional liability ranges from considerable--if the Government were the cause of the project's failure--to minimal--should UEA prove to be responsible.

The gross negligence language in the proposal is used to indicate a situation where the Government would bear no extra responsibility, beyond the responsibility for the domestic debt, because UEA in its management of the project had blatantly misbehaved. However, as we pointed out in our October 31, 1975, report (RED-76-36), other provisions of the proposal so closely tie the Government to UEA's every move that the eventuality of UEA ever being solely responsible for the project's failure is unlikely. Consequently, it is improbable that the Government would ever be able to walk away from a transfer of ownership with no payment beyond that made for the domestic debt liabilities which UEA had incurred before the transfer.

With respect to responsibility for gross negligence, a notice of complaint would first have to be issued by the Government and, as the Vice Chairman noted, UEA would be accorded an opportunity "to respond reasonably to the notice." If UEA did not take reasonable steps toward correction, the Government could take over the plant without compensating the equity stockholders. In the intervals between the notice and ERDA's proof of charges and UEA's opportunity to rectify, UEA could withdraw from the project. UEA's entitlement to equity compensation, however, would be subject to a determination by ERDA as to gross mismanagement of which UEA had been notified. As noted above, we believe proving gross mismanagement on UEA's part is unlikely.

FOREIGN PARTICIPANTS AND CONTROL AND APPLICABILITY OF EXPORT CONTROLS

The Vice Chairman's February 1976 letter raised a number of questions on (1) whether foreign investors would be required to contribute their share of cost overruns, their rights of termination, and the effect of their possible termination on the Government's obligations and rights, (2) the appropriateness of guaranteeing a large portion of production to foreign investors, (3) whether provisions of the UEA proposal violate section 103(d) of the Atomic Energy Act relating to foreign control of domestic nuclear industries, and (4) the impact of uranium export license procedures on foreign investors' ability to export their product from the UEA plant.

UEA's May 30, 1975, proposal states that:

> "UEA contracts with foreign customers will require that each such customer provide, on a firm basis, all of the capital investment proportional to each customer's subscription to the output from the enrichment plant."

ERDA officials said that through this provision UEA intends to have foreign participants contribute their prorated share for any cost overruns. If foreign participants do not contribute to cost overruns, they will receive a proportionately lower percent of plant product. UEA officials expect foreign capital to be provided through irrevocable letters of credit between the United States and foreign banks.

Under these arrangements, foreign financiers have no legal termination rights. Once foreign participants become committed to the project, the U.S. Government is not obligated to purchase or assume their equity or debt. If the Government takes over the plant, ERDA expects that foreign countries will continue to provide their prorated share of the funds, including cost overruns. If the foreign participants do not continue their payments, the Government's only recourse would be to reduce that participant's share of the plant's product.

UEA's guaranteed product apportionment to domestic and foreign groups is based on UEA's market review which indicates that about 60 percent of the plant's 25-year contracts will be in demand for foreign reactors and about 40 percent for domestic reactors. ERDA officials said that the contract with UEA would specify a maximum of 60 percent total foreign participation with a maximum of 20 percent participation by any individual foreign country.

Although foreign sources are expected to provide 60 percent of the required capital, the corporation established by UEA to handle the business aspects of the project is expected to have 40 percent domestic participation with 55 percent of the voting rights and 60 percent foreign participation with 45 percent of the voting rights. ERDA officials told us the contract between ERDA and UEA would contain a provision to insure domestic control.

The Vice Chairman questioned the applicability of section 103(d) (42 U.S.C. 2133(d)) of the Atomic Energy Act to the Nuclear Fuel Assurance Act. Section 103(d) provides in pertinent part that

> "* * * /n/o license may be issued to an alien or any corporation or other entity if the Commission knows or has reason to believe it is owned, controlled, or dominated by an alien, a foreign corporation, or a foreign government."

The Energy Reorganization Act makes the Nuclear Regulatory Commission (NRC) responsible for assuring that this provison

of the Atomic Energy Act is met before a nuclear facility is licensed.

The Atomic Energy Act, however, does not specifically define what constitutes foreign ownership, control, or domination. According to NRC, each license application for a nuclear facility involving foreign participation is evaluated on a case-by-case basis. NRC has evaluated three previous cases which have involved foreign participation in research and development reactors and a reprocessing plant. NRC plans to begin its evaluation process when UEA submits a license application.

According to NRC officials, (1) NRC's approval of the construction and operation of UEA's enrichment facility does not imply prior approval for the export of the enriched material to the foreign customers, (2) shipments of enriched uranium to foreign customers will be exported under separate licenses in accordance with the Atomic Energy Act, the Energy Reorganization Act, and NRC regulations, and (3) foreign customers will not receive blanket export licenses for the entire contracted amount of enriched uranium. In short, both the UEA facility and the enriched uranium exports from the facility will have to meet the same NRC licensing and export requirements as are applied to all other nuclear facilities and export transactions.

DEVELOPMENT OF GAS CENTRIFUGE PROCESS

Given the fact that the advancement of gas centrifuge process is in the national interest and that the Federal gas centrifuge research and development program has advanced to the stage requiring demonstration projects to bridge the remaining gap to industrial or commercial use, the Vice Chairman's February 1976 letter questioned whether ERDA could seek congressional approval for desirable demonstration projects in its current authorization act this year with appropriations requested, and provided, in due course. He said that the Nuclear Fuel Assurance Act would be unnecessary for further development and demonstration of gas centrifuge.

The Nuclear Fuel Assurance Act would not be needed for ERDA to seek congressional approval for a joint industry-government centrifuge enrichment demonstration project. Such legislation would be needed, however, to provide industry with the incentives to build and operate commercial gas centrifuge enrichment plants.

ERDA has constructed a pilot centrifuge plant, and startup is expected in the fall of 1976. The pilot plant will "proof test" the design and operation of the entire production process system. It will provide plant design, construction, startup, and operating experience to aid in the process and equipment selection for new enrichment capacity. Such plant experience is needed for the centrifuge process.

ERDA has included funding in its 1977 budget for a centrifuge plant demonstration facility at Oak Ridge, Tennessee. This demonstration plant will not be a joint industry-government project. It will be a facility to test a first production cascade 1/--the basic building block for a centrifuge enrichment plant. This cascade will very closely duplicate the configurations and conditions planned for the first large-scale commercial centrifuge enrichment plants.

According to ERDA officials, the demonstration plant will differ from the pilot plant in that it will demonstrate the use of more advanced centrifuge machines. Also, the design and configuration used in the demonstration plant, although on a small scale, will have a direct impact on future commercial efforts.

The demonstration plant, expected to be completed in 1981, is to be a vital part of the centrifuge industry development. ERDA plans to develop the demonstration plant slightly ahead of the planned commercial plants and expects private industries' efforts to closely parallel the demonstration plant design and configuration. ERDA officials believe that delaying commercial development until the technology is fully demonstrated could delay the commercialization of the centrifuge technology by as much as 5 years. According to ERDA, such a delay would be unacceptable in view of the need for enriched uranium capacity in the mid to late 1980s.

We agree that ERDA should seek and encourage private industry to continue efforts in advanced technologies through explicit programs. We recognize that Government assistance and assurances will be required. In any proposal by private industry seeking Government assistance and assurances for centrifuge development, however, the Government should seek

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1/ A single cascade can usually produce only a small amount of separation, but if a number of these are connected together, the effect can be multiplied and a significant amount of separation achieved.

equitable sharing of risk by the private enrichers and the Government in any arrangement involving the private ownership of enrichment capacity.

APPENDIX II

COMPTROLLER GENERAL OF THE UNITED STATES
WASHINGTON, D.C. 20548

B-159687

MAR 16 1976

The Honorable Edmund S. Muskie
Chairman, Committee on the Budget
United States Senate

Dear Mr. Chairman:

This refers to your letter of February 16, 1976, in which you asked our opinion on whether the contract authority authorized by S.2035, the "Nuclear Fuel Assurance Act of 1975," is "budget authority" within the definition of the Congressional Budget Act of 1974, titles I-IX of Pub. L. No. 93-344, July 12, 1974. In this regard, you note that the Office of Management and Budget (OMB) apparently takes the position that the authority authorized by S.2035 does not constitute budget authority within the meaning of the 1974 statute because it is representative only of a contingent liability of the United States. Thus, OMB does not believe it is required to include initially the authority in the Budget.

THE RELEVANT PROVISIONS OF S.2035

General

As I noted in my testimony of December 10, 1975, before the Joint Committee on Atomic Energy, copy attached, S.2035, if enacted, would:

1. Authorize the Energy Research and Development Administration (ERDA) to enter into cooperative arrangements with as many private firms that wish to build, own, and operate enrichment plants as the ERDA Administrator believes necessary to develop a competitive industry;

2. Authorize ERDA to provide various forms of assistance and assurances under such arrangements;

3. Limit the Government's total potential liability to $8 billion in the event that the private ventures fail and the Government has to take them over;

4. Authorize ERDA to start construction planning and design activities for expanding one of the

Government's existing enrichment plants as a contingency measure; and

5. Provide for congressional review of the basis for the cooperative arrangements by the Joint Committee.

In addition to my testimony, on October 31, 1975, we submitted a comprehensive report to the Joint Committee on Atomic Energy which, among other things, evaluated the subject legislation. A copy of this report is also enclosed.

The Authority Granted

As noted, S.2035 proposes that authority be given to ERDA to enter into cooperative agreements with private industry for the expansion of the nation's uranium enrichment capacity. As regards the potential outlay of Government funds, it is clear that such authority would take the form of contract authority. Section 3 of the bill, in part, sets forth the mechanism by which the contract authority is granted:

> "SEC. 3. The Administrator of the Energy Research and Development Administration is hereby authorized to enter into contracts for cooperative arrangements, without fiscal year limitation, pursuant to section 45 of the Atomic Energy Act of 1954, as amended, in an amount not to exceed in the aggregate $8,000,000,000 as may be approved in an appropriation Act." (Emphasis added.)

Thus, passage of S.2035 would not, per se, be sufficient to create budget authority--its provisions cannot be implemented until such action is specifically approved in an appropriation act. That this procedure is intended is shown by both the language of the bill and the Joint Committee hearings thereon. The procedure is required by title IV of the Budget Act.

Should it be necessary to liquidate any contract authority granted in an appropriation act, section 3 of S.2035 states--

> " * * * In the event that liquidation of part or all of any financial obligations incurred under such cooperative arrangements should become necessary, the Administrator of the

> Energy Research and Development Administration is authorized to issue to the Secretary of the Treasury notes or other obligations up to the levels of contract authority approved in an appropriation Act pursuant to the first sentence of this section [the previously quoted excerpt] * * *." (Emphasis added.)

And, during testimony before the Joint Committee on S.2035, Mr. R. Tenney Johnson, General Counsel, ERDA, stated--

> "There is no committment to be entered into by the ERDA negotiating team until there has been action by the Appropriations Committee and action by this committee that would permit the making of the committment." Hearings on S.2035 before the Joint Committee on Atomic Energy, 94th Cong., 1st Sess., at 9 (1975).*/ (Emphasis added).

Thus, we think it is clear that S.2035 is authorizing legislation that, if passed, would require subsequent approval in an appropriation act before contract authority is created. The question is whether that contract authority is "budget authority" within the meaning of the Budget Act. If it is, it must be listed in the Budget. Budget Act, title III.

The Nature of the Federal Financial Committments

As indicated, S.2035 sets forth the various types of cooperative arrangements with private industry into which ERDA may enter. The bill would authorize ERDA to

> "* * * enter into cooperative arrangements with any person or persons for such periods of time as the Administrator of the Energy Research and Development Administration may deem necessary or desirable for the purpose of providing such Government cooperation and assurances as the Administrator may deem

*/ Hereinafter referred to as "Hearings."

> appropriate and necessary to encourage the development of a competitive private uranium enrichment industry * * *" (Emphasis added.)

The hearings on S.2035 make clear that the quoted language is intended to allow ERDA (and, therefore, the United States) to assume, insofar as approved in an appropriations act, the capacity of a financial guarantor of the debts incurred by a private enterprise incident to its development of expanded uranium enrichment facilities. See, e.g., Hearings at 8, 14, 43, 51, 53, 75, 78, 135, 151, 162, 171, and 182. Our comments that follow on S.2035, however, are made with only the most tentativ and preliminary knowledge of the details of whatever cooperative agreement ERDA may enter into in its capacity of what the hearings repeatedly refer to as "guarantor." It should be further noted that the amount of the guarantees ERDA can offer may be limited by the necessary approval it must obtain in the appropriations act. Nevertheless, in general outline, it appears that the Federal government would, if a cooperative agreement so provided within the limits established by the appropriations act, be obligated to honor the debts incurred by the private enterprise that was party to that agreement and that experienced financial difficulty.

Procedures in the Event of Default

Should it become necessary to honor a financial guarantee, S.2035 sets forth the procedure by which ERDA obtains funds to liquidate its contract authority obligations:

> " * * * In the event that liquidation of part or all of any financial obligations incurred under such cooperative arrangements should become necessary, the Administrator of the Energy Research and Development Administration is authorized to issue to the Secretary of the Treasury notes or other obligations up to the levels of contract authority approved in an appropriation Act * * *"

The bill further specifies that the notes and obligations issued to the Secretary of the Treasury by ERDA shall contain terms satisfactory to the former and that the Secretary is authorized to use funds derived from the proceeds of securities issued pursuant to the Second Liberty Bond Act to purchase ERDA's notes. Finally, the Secretary of the Treasury is to treat his purchase of ERDA notes as public debt transactions of the United States.

THE BUDGET ACT OF 1974

The Budget Act of 1974 is a comprehensive statute that sets forth many of the procedures by which the Federal budgetary process is to operate.

The statute also defines some of the budget terms under its purview. Among the concepts defined is the term "budget authority":

> "The term "budget authority" means authority provided by law to enter into obligations which will result in immediate or future outlays involving Government funds, except that such term does not include authority to insure or guarantee the repayment of indebtedness incurred by another person or government." Act, section 3(a)(2), 31 U.S.C. 1302(a)(2) (emphasis added).

This provision sets forth two relevant criteria that must be satisfied before the authority to enter into obligations to expend money is to be considered "budget authority." First, there must be a certainty that the obligations entered into with the the authority granted will cause either present or future Federal expenditures. And, second, the authority may not be a guarantee.

The legislative history of the Budget Act provides the rationale for the Act's treatment of guarantees:

> "The Committee substitute clarifies the status of insured and guaranteed loans. Such loans are not direct obligations of the United States, and a liability is incurred only in the case of default. Thus, it would not be appropriate to regard such contingent liabilities as budget authority for purposes of determining the appropriate levels in the budget resolution. Nor should loan guarantees be subjected to the new procedures for handling backdoor spending authority. Of course if the United

> States is required to make any outlays pursuant to its guarantee of loans, such outlays are included in the budget." S. Rept. No. 93-688, 93d Cong., 2d Sess. 13 (1974) (emphasis added).

See also page 99 of the Special Analyses, Budget of the United States Government, Fiscal Year 1977 which states the existing practice regarding the budgetary handling of guarantees:

> "Guaranteed loans, like off-budget direct loans, are not reflected in the budget at the time credit is extended. Budget impacts from loan guarantee programs, excepting additional subsidies and administrative costs, occur only when defaults require the Federal Government to pay lenders' claims."

We have not, in addressing the question whether the contract authority contemplated by S.2035 would become "budget authority" as that term is defined in the Budget Act, confined our considerations to the fact that authority to guarantee indebtedness is excluded from the definition. We have also taken into account that the fundamental objective of the Congressional Budget Act of 1974 was to establish a process through which the Congress could systematically consider the total Federal budget and determine priorities for the allocation of budget resources. We believe this process achieves its maximum effectiveness when the Budget represents as complete as possible a picture of the financial activities of Federal agencies. We further believe it is vital to maximizing the effectiveness of the process that Federal financial resources be measured as accurately as possible because priorities are actually established through decisions on the conferring of this authority. From this standpoint, therefore, the concept of "budget authority" should (a) encompass all actions which confer authority to spend money, (b) reflect as accurately as possible the amount of such authority which is conferred and (c) be recognized at the point at which control over the spending of the money passes from the Congress to the administering agency.

While the concept of "budget authority" is relatively simple, it is difficult to apply because of the wide diversity of Federal activities and the variety of forms in which the authority to

spend money is conferred. The application of the concept to loan guarantee programs is particularly difficult because the amount of money which eventually may be spent is usually uncertain. Because of this uncertainty, the traditional budget treatment of loan guarantee programs prior to passage of the Budget Act has been to disregard the face amount of the contingent liability in measuring budget authority and look, instead, to some other indicator of probable cost as a more reliable indicator of the actual budget resource impact of the authority which has been conferred.

In many cases, a useful alternative indicator has been the financing which was provided to liquidate the contingent liability. If, for example, an agency has been authorized to guarantee $100 million in loans and has been authorized to borrow $20 million from the Treasury, if necessary, to liquidate the guarantee, traditional budgetary treatment prior to passage of the Budget Act would have counted the $20 million as budget authority, not the $100 million. The logic behind this approach was that the financing provided to liquidate the guarantees presumably represented the probable upper end of the range of potential cost of the program. Under these circumstances, the financing that was provided was a better indicator of the resource commitment than the face value of the guarantee.

The alternatives to this approach are:

1. Consider the entire amount of the guarantee as the resource commitment; or

2. Construct some other estimate of the probable cost; or

3. Consider no part of the amount of the guarantee as a resource commitment.

The first is a distortion in that a loan guarantee approach only makes sense where some of the loans will not be subject to default. The second alternative is attractive in theory, but in most cases will produce a result similar to the traditional one. That is, the financing provided in a program can be presumed to bear some relationship to anticipated costs. In addition, where the Congress has voted a specific limitation, there attaches a significance which could not be attached to a separately

determined estimate. The third alternative discounts the fact there is some risk, and thus some implicit commitment of resources, or the loan guarantee would be unnecessary.

For the reasons more fully set forth below, the third alternative--consider no part of the amount of the guarantee as a resource committment--nevertheless is the one permitted by the Budget Act's definition of "budget authority." The definition clearly excludes guarantees. The consequence, we believe, is to thwart Congress' achieving the maximum effectiveness of the process it established to review the Federal budget and determine priorities. For this reason, it is appealing to entertain the possibility that when Congress defined "budget authority" as it did, it merely intended by such language to continue the pre-Budget Act practice of avoiding the listing in the Budget of the unfinanced portions of Federal guarantees. Thus, because S.2035 provides that all of the guarantee authority would be financed (the entire obligation is funded via Treasury loans to ERDA), any such authority appropriated would be listed in the Budget.*/

LEGAL RATIONALE

However appealing the foregoing, it does not adequately deal with the requirements of the section 3(a)(2) definition: certainty of expenditure; and the express exclusion of guarantees. Thus, since the authority appropriated to ERDA pursuant S.2035 would be contract authority to be used for financial guarantees; and, since guarantees are excluded from the definition of budget authority, it therefore follows that committments made pursuant to S.2035 would not come within the meaning of "budget authority."

*/ Even assuming such an intention on Congress' part in passing the Budget Act, S.2035 would present a special problem. The bill authorizes financing equal to the face amount of the outstanding guarantees. That is, with an appropriation of $8 billion in contract authority, ERDA would be authorized to borrow from the Treasury an amount equal to the amount of the authorized contracts. This appears to be an unusually high level of financing for a loan guarantee program, but it is in fact the amount of financing which the bill would authorize and therefore, might be considered the most reasonable available measure of the committment of Federal financial resources.

Moreover, because there is no assurance that guarantees would ever need to be honored, since the ERDA committments contemplated by S.2035 are to be used for guarantees, such committments would also fail to satisfy the definitional criterion that the obligations "will result" in immediate or future Federal outlays. See, in this regard, the language and history of the Budget Act, above.

Furthermore, the legislative history of S.2035 supports the view that the S.2035 guarantee authority was not intended to be budget authority until such time as the United States is required to pay in the event of default. For example, during the Joint Committee hearings on the bill there was discussion of the alternatives that were available to implement expanded uranium enrichment facilities; one of which was to publicly finance the uranium enrichment operations. Thus, the following colloquy between Chairman Pastore and Dr. Seamans, Administrator, ERDA, took place:

> "Chairman Pastore. You see, doctor, I was in on the beginning of this. The way this started, every one conceded that we needed an expansion of facilities. When we discussed this before the committee--this is some time back, I am going back to the genesis of this problem--we realized that this required a tremendous amount of money. If you had to provide that money in the budget, it would throw the budget out of whack.
>
> "So we began to search around and say; How can we expand this without putting a large sum of money in the budget? That was the genesis that established the policy of going private.
>
> "Now I tell you frankly if this is a job that private industry can do as well as Government, and even better, it ought to go private. The only question that is before this committee is that we ought to know exactly what we are getting into and we ought to make sure that whatever we do here now doesn't bind us, that if there is a bad deal that is arrived at in the opinion of the Congress that there is no way that we can extricate ourselves unless we put in a petition or a bill to repudiate it.
>
> "I think if we put our heads together, and we are convinced that this is the right way for

> the Government to go rather than put a big bunch of money in the next budget, if this is the only way we can get this expansion for the time being, because the previous administration and this one here have been reluctant to come up with this money for the simple reason that there is a constraint on the budget, if this is the only way we can get the expansion, we can cut out a lot of the redtape, get down to the basics, find out what we are up against and go ahead and do it. But we have to be partners; we can not be adversaries because if we are adversaries nothing will happen. Is that clear?
>
> "Dr. Seamans. It is clear, and I agree with it." Hearings at 52-53 (emphasis added.)

See also Hearings at 75.

While initial guarantees would not be required to be listed in the Budget, such contingent liabilities apparently would be noted in the Budget at a later time; that is, when default actually occurs. As described earlier, the liquidation provisions of S.2035 authorize money to be drawn from the Treasury in return for notes issued by ERDA. S.2035 specifies that such transactions are treated as public debt transactions:

> "All redemptions, purchases, and sales by the Secretary of the Treasury of such notes or other obligations [from ERDA] shall be treated as public debt transactions of the United States."

Concerning the handling of public debt transactions, section 301(a)(5) of the Congressional Budget Act, 31 U.S.C. 1322(a)(5), states that the congressional budget resolution (and, therefore, the President's Budget) shall set forth the appropriate level of the public debt and recommended changes in the level of that debt. See section 601 of the Budget Act.

CONCLUSION

The language and legislative histories of S.2035 and the Budget Act do not require the authority that would be granted pursuant to the bill to be regarded as "budget authority" within the meaning of the Budget Act.

B-159687

As we have noted above, our comments on S.2035 are based on the most tentative and preliminary knowledge of the details of whatever cooperative agreement ERDA may enter into in its capacity of what the hearings repeatedly refer to as "guarantor." Moreover, whatever may prove to be the specific details of the cooperative arrangement ERDA enters into as "guarantor," the prospect of such contract authority not being included in the Budget prior to default is not only relatively novel but also threatens to establish an undesirable precedent. While the Budget Act does not appear to forbid this result, it does not mandate it either.

We believe that for Congress to achieve the maximum effectiveness of the process it established to control the Budget, the amounts of authority approved by appropriation acts for cooperative arrangements pursuant to S.2035 should be reflected in the Budget.

Sincerely yours,

SIGNED ELMER B STAATS

Comptroller General
of the United States

Enclosures

UNITED STATES
ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION
WASHINGTON, D.C. 20545

APPENDIX III

February 23, 1976

Honorable John O. Pastore, Chairman
Joint Committee on Atomic Energy

Dear Mr. Chairman:

During the course of the Joint Committee's recent hearings on the President's proposed Nuclear Fuel Assurance Act of 1975 (S.2035), you and other members of the Committee expressed concern that the proposed Act did not provide sufficient opportunity for Congressional oversight of cooperative agreements negotiated pursuant to the Act. You proposed that additional Congressional review and approval requirements be included in the Act which would be comparable to those provided for in the case of Agreements for Cooperation in Section 123(d) of the Atomic Energy Act, as amended.

Subsequently, ERDA staff met with JCAE staff to review language that would accomplish this objective. We understand that the proposed language would, in brief, provide that each unsigned cooperative arrangement be submitted for a 60-day period of Congressional consideration. The 60-day period would allow 30 days for JCAE review and recommendations to each House of Congress and also require action within an additional 30-day period by each House in the form of a concurrent resolution of approval or disapproval. A comparative draft of the original and the revised S.2035 showing the revisions is attached.

I am pleased to advise you that the amendments you proposed are acceptable. I would like to commend the JCAE staff for their constructive approach to the development of the revised language. They made an important contribution to the removal of the remaining obstacle to action on this bill which is of great importance to the Nation.

APPENDIX III

Honorable John O. Pastore

We are looking forward to favorable Committee action on the revised bill at the earliest possible date.

Sincerely,

/s/

Robert C. Seamans, Jr.
Administrator

Attachment:
Revised Bill

cc: AMF, 3 (1 Pink, 2 Whites)
OCR, 2
DA
EA
ANE, 2

Distributon:
1-2 Addressee
3-11 cc's as noted
12-16 NFCP Files (1 Green, 4 Whites)
17 WRVoigt Files
18-22 NFAO

COMPARATIVE DRAFT

S. 2035, REVISED

To authorize cooperative arrangements with private enterprise for the provision of facilities for the production and enrichment of uranium enriched in the isotope-235, to provide for authorization of contract authority therefor, to provide a procedure for prior congressional review and disapproval of proposed arrangements, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, J. 63-057 That this Act may be cited as the "Nuclear Fuel Assurance Act of 1975".

SEC. 2. Chapter 5 (production of special nuclear material) of the Atomic Energy Act of 1954, as amended, is amended by adding at the end thereof the following section.

"SEC. 45. COOPERATIVE ARRANGEMENTS FOR PRIVATE PROJECTS TO PROVIDE URANIUM ENRICHMENT SERVICES.—

"a. The Administrator of Energy Research and Development ~~Administration~~ is authorized, subject to the prior congressional review procedure set forth in subsection b. of this section without regard to the provisions of section 169 of this Act, to enter into cooperative arrangements with any person or persons for such periods of time as the Administrator of ~~the Energy Research and Development Administration~~ may deem necessary or desirable for the purpose providing such Government

APPENDIX III

cooperation and assurances as the Administrator may deem appropriate and necessary to encourage the development of a competitive private uranium enrichment industry and to facilitate the design, construction, ownership, and operation by private enterprise of facilities for the production and enrichment of uranium enriched in the isotope-235 in such amounts as will contribute to the common defense and security and encourage development and utilization of atomic energy to the maximum extent consistent with the common defense and security and with the health and safety of the public; including, inter alia, in the discretion of the Administrator,

"(1) furnishing technical assistance, information, inventions and discoveries, enriching services, materials, and equipment on the basis of recovery of costs and appropriate royalties for the use thereof;

"(2) providing warranties for materials and equipment furnished;

"(3) providing facility performance assurances;

"(4) purchasing enriching services;

"(5) undertaking to acquire the assets or interest of such person, or any of such persons, in an enrichment facility, and to assume obligations and liabilities (including debt) of such person, or any of such persons, arising out of the design, construction, ownership, or operation for a defined period of such enrichment facility in the

event such person or persons cannot complete that enrichment facility or bring it into commercial operation: Provided, That any undertaking, pursuant to this subsection (5), to acquire equity or pay off debt, shall apply only to ~~individuals~~ investors or lenders who are citizens of the United States, or ~~to any~~ are a corporation or other entity organized for a common business purpose, which is owned or effectively controlled by citizens of the United States; and

"(6) determining to modify, complete, and operate that enrichment facility as a Government facility or to dispose of the facility at any time, as the interest of the Government may appear, subject to the other provisions of this Act.

"b. ~~Before the Administrator enters into any arrangement or amendment thereto under the authority of this section, or before the Administrator determines to modify, or complete and operate any facility or to dispose thereof, the basis for the proposed arrangement or amendment thereto which the Administrator proposes~~

APPENDIX III

to execute (including the name of the proposed participating person or persons with whom the arrangement is to be made, a general description of the proposed facility, the estimate amount of cost to be incurred by the participating person or persons, the incentives imposed by the agreement on the person or persons to complete the facility as planned and operate it successfully for a defined-period, and the general features of the proposed arrangement or amendment), or the plan for such modification, completion, operation, or disposal by the Administrator, as appropriate, shall be submitted to the Joint Committee on Atomic Energy, and a period of forty five days shall elapse while Congress is in session (in computing such forty five days, there shall be excluded the days on which either House is not in session because of adjournment for more than three days) unless the Joint Committee by resolution in writing waives the conditions of, or all or any portion of, such forty five day period. Provided, however, That any such arrangement or amendment thereto, or such plan, shall be entered into in accordance with the basis for the arrangement or plan, as appropriate, submitted as provided herein".

APPENDIX III

"b. The Administrator shall not enter into any arrangement or amendment thereto under the authority of this section, modify, or complete and operate any facility or dispose thereof, until the proposed arrangement or amendment thereto which the Administrator proposes to execute, or the plan for such modification, completion, operation or disposal by the Administrator, as appropriate, has been submitted to the Joint Committee on Atomic Energy, and a period of sixty days has elapsed while Congress is in session without passage by the Congress of a concurrent resolution stating in substance that it does not favor such proposed arrangement or amendment or plan for such modification, completion, operation, or disposal (in computing such sixty days, there shall be excluded the days on which either House is not in session because of adjournment for more than three days).": Provided, That prior to the elapse of the first thirty days of any such sixty-day period the Joint Committee shall submit a report to the Congress of its views and recommendations respecting the proposed arrangement, amendment or plan and an accompanying proposed concurrent resolution stating in substance that the Congress favors, or does not favor, as the case may be, the proposed arrangement, amendment or plan. Any such concurrent

resolution so reported shall become the pending business of the House in question (in the case of the Senate the time for debate shall be equally divided between the proponents and the opponents) within twenty-five days and shall be voted on within five calendar days thereafter, unless such House shall otherwise determine.

SEC. 3. The Administrator of ~~the~~ Energy Research and Development ~~Administration~~ is hereby authorized to enter into contracts for cooperative arrangements; without fiscal year limitation, pursuant to section 45 of the Atomic Energy Act of 1954, as amended, in an amount not to exceed in the aggregate $8,000,000,000 as ~~may be approved in an appropriation Act~~ but in no event to exceed the amount provided therefor in a prior appropriation Act: Provided, That the timing, interest rate, and other terms and conditions of any notes, bonds, or other similar obligations secured by any such arrangements shall be subject to the approval of the Administrator with the concurrence of the Secretary of the Treasury. In the event that liquidation of part or all of any financial obligations incurred under such cooperative arrangements should become necessary, the Administrator ~~of the Energy Research and Development Administration~~ is authorized to issue to the Secretary of the Treasury notes or other obligations up to the levels of contract authority approved in an appropriation Act pursuant to the first sentence of this section in such form and denomination, bearing such maturity and subject to such terms and conditions as may be prescribed by the Administrator with the

approval of the Secretary of the Treasury. Such notes or other obligations shall bear interest at a rate determined by the Secretary of the Treasury, taking into consideration the current average market yield on outstanding marketable obligations of the United States of comparable maturity at the time of issuance of the notes or other obligations. The Secretary of the Treasury shall purchase any notes or other obligations issued hereunder and, for that purpose, he is authorized to use as a public debt transaction the proceeds from the sale of any securities issued under the Second Liberty Bond Act, as amended, and the purposes for which securities may be issued under that Act, as amended, are extended to include any purchase of such notes and obligations. The Secretary of the Treasury may at any time sell any of the notes or other obligations acquired by him under this section. All redemptions, purchases, and sales by the Secretary of the Treasury of such notes or other obligations shall be treated as public debt transactions of the United States. There are authorized to be appropriated to the Administrator such sums as may be necessary to pay the principal and interest on the notes or obligations issued by him to the Secretary of the Treasury.

SEC. 4. The Administrator of the Energy Research and Development ~~Administration~~ is hereby authorized to initiate construction planning and design activities for expansion of an existing uranium enrichment facility. There ~~is~~ are hereby authorized to be appropriated such sums as may be necessary for this purpose.

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